ICF-400

AEP Model
UK Model

FM/MW/LW 3-BAND RECEIVER

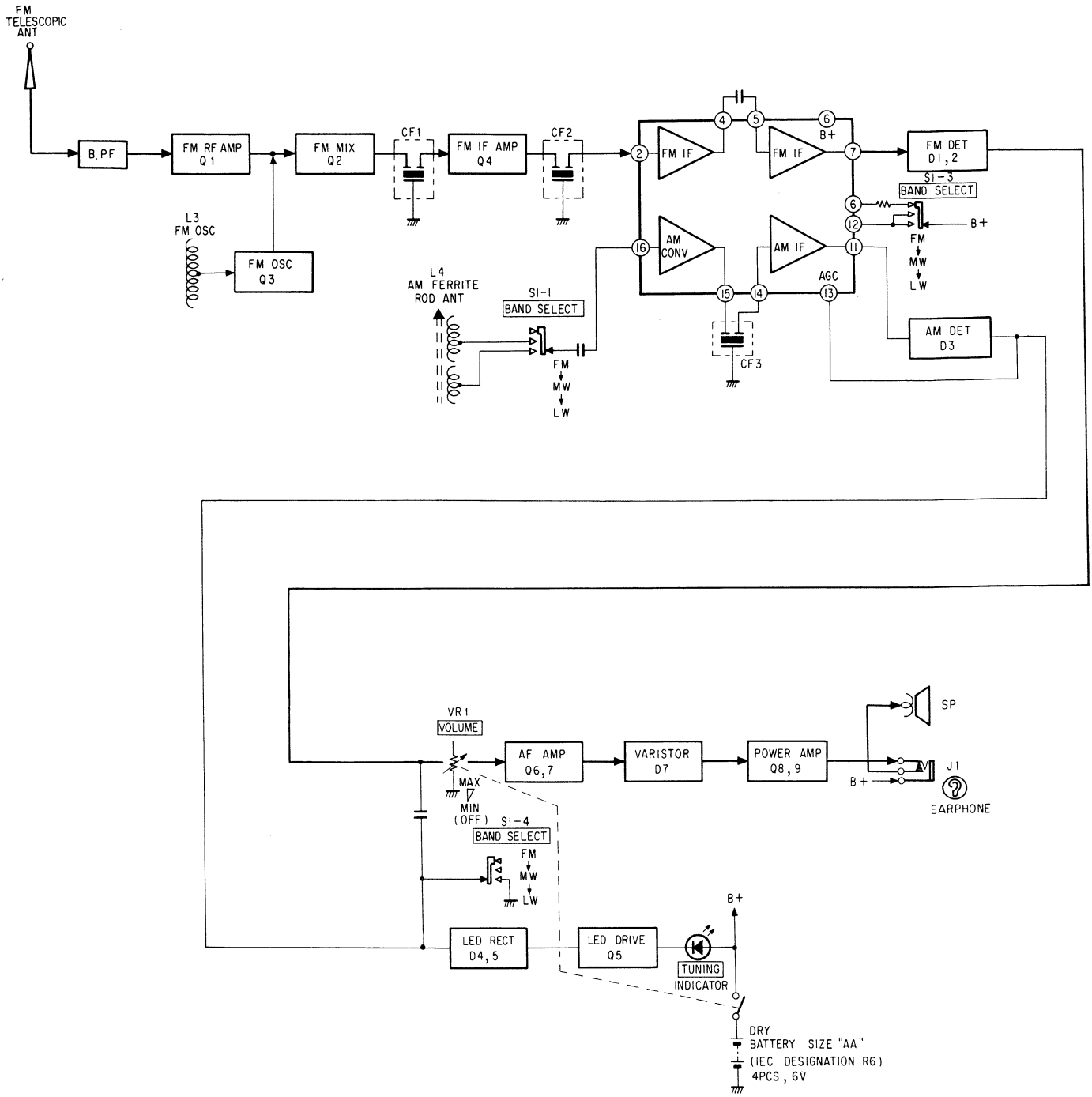
SPECIFICATIONS

Frequency Range:	FM 87.6 – 108 MHz MW 530 – 1,605 kHz (566 – 187 m) LW 150 – 255 kHz (2,000 – 1,154 m)
Antennas:	FM: Telescopic antenna MW/LW: Built-in ferrite bar antenna
Speaker:	Approx. 6.6 cm (2 5/8 inches) dia.
Power Output:	250 mW (at 10 % harmonic distortion)
Output Jack:	Earphone jack (minijack)
Power Requirements:	6 V dc with four IEC designation R6 (size AA) batteries
Dimensions:	Approx. 154 (w) x 82 (h) x 38 (d) mm (6 1/8 (w) x 3 1/4 (h) x 1 1/2 (d) inches) including projecting parts and controls
Weight:	Approx. 430 g (15 oz) including batteries

MICROFILM

SONY®
SERVICE MANUAL

SECTION 1
BLOCK DIAGRAM



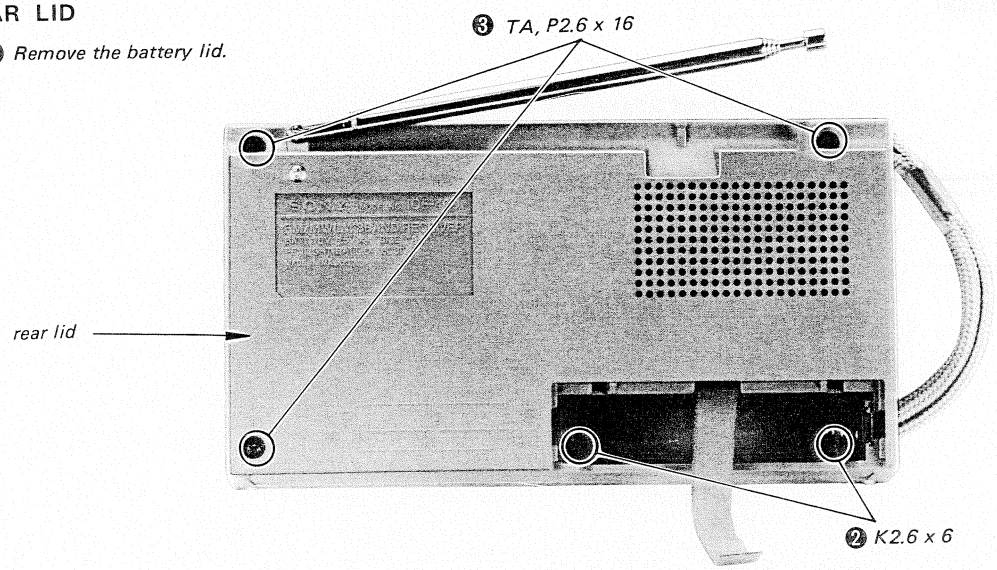
SECTION 2
DISASSEMBLY

2-1. REMOVAL

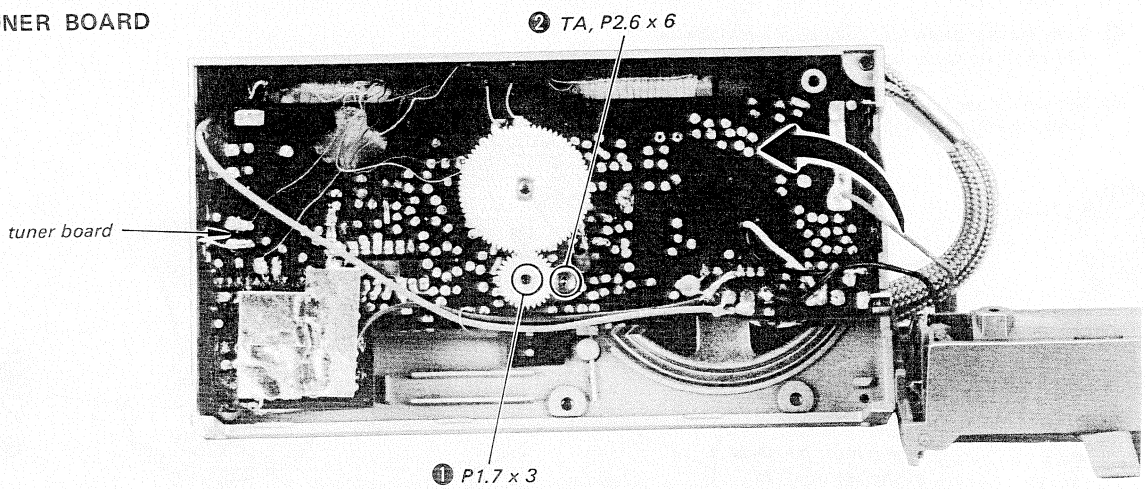
Note: Follow the disassembly procedure in the numerical order given.

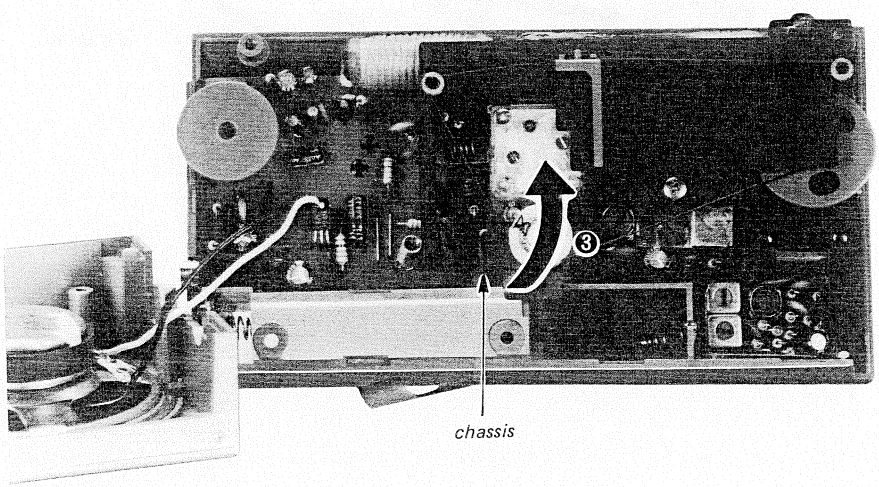
REAR LID

❶ *Remove the battery lid.*



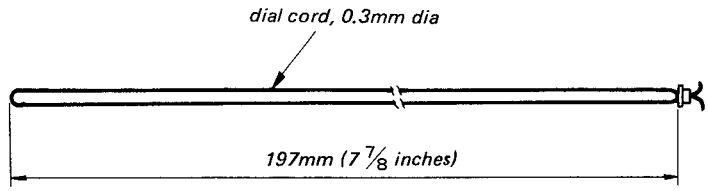
TUNER BOARD





2-2. DIAL CORD STRINGING

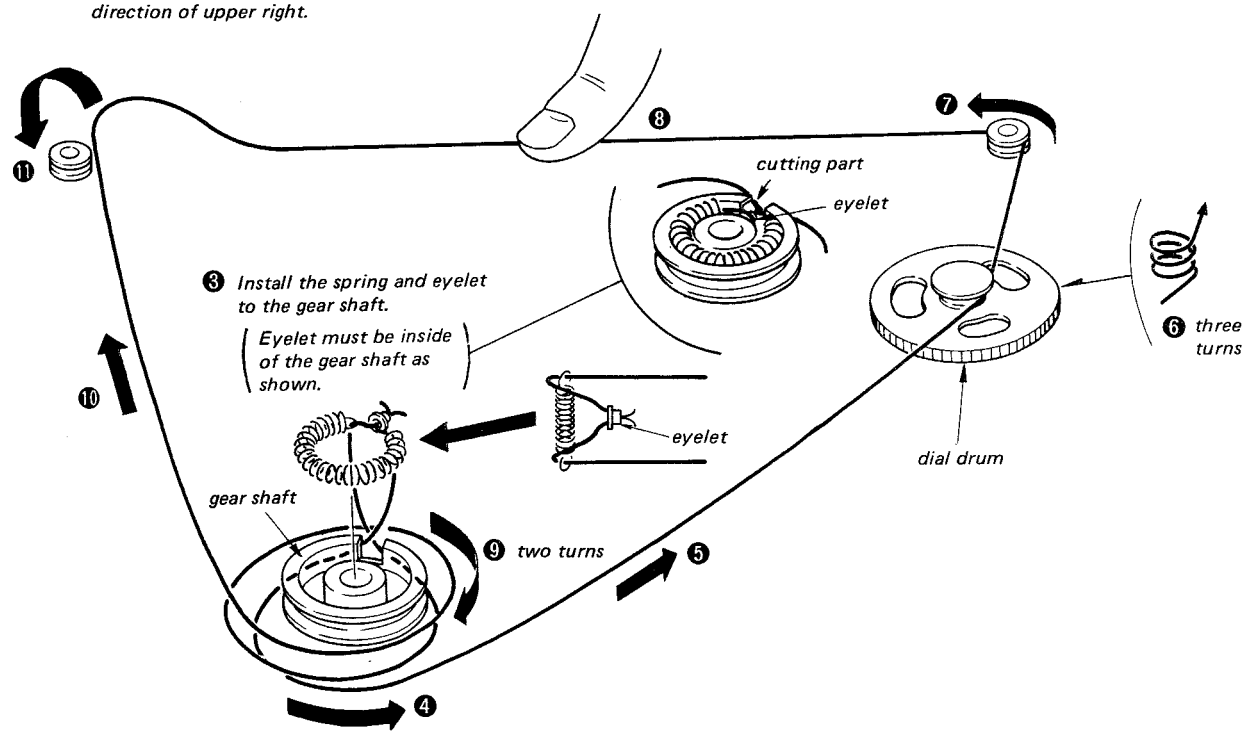
1) Dial Cord Preparation



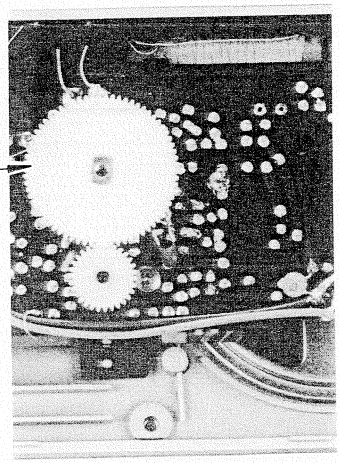
2) Dial Cord Stringing

❶ *Turn the dial drum gear fully counterclockwise. (Refer to the upper on next page.)*

❷ *Set the cutting part of the gear shaft in the direction of upper right.*

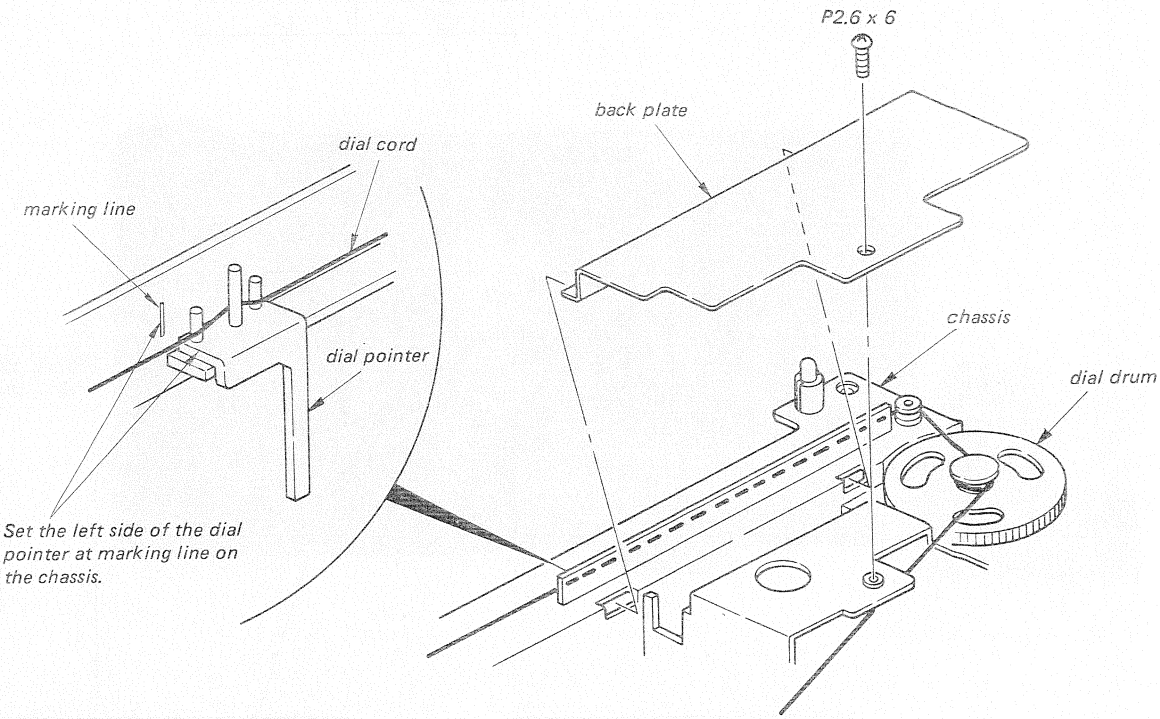

❸ Install the spring and eyelet to the gear shaft.
Eyelet must be inside of the gear shaft as shown.
cutting part
eyelet
❻ three turns
dial drum
eyelet
gear shaft
❾ two turns
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫

3) Dial Pointer Setting



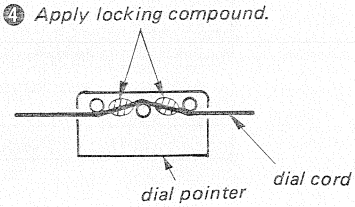
❶ *Turn the dial drum gear fully counterclockwise.*

❷ *Install the back plate to the chassis.*



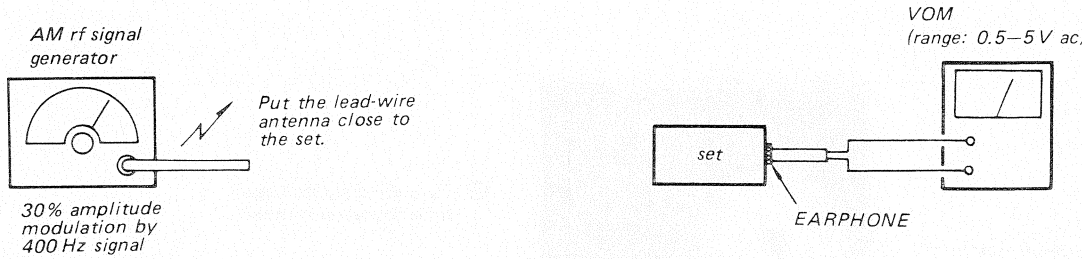
❸ *Set the left side of the dial pointer at marking line on the chassis.*

❹ *Apply locking compound.*



SECTION 3
ADJUSTMENTS

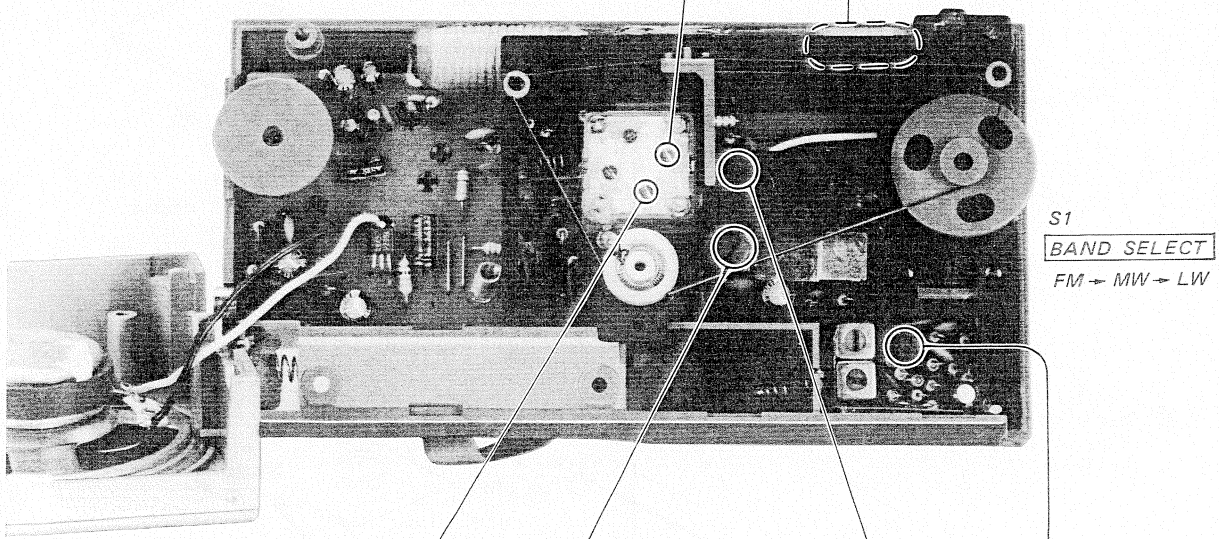
AM SECTION



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

MW BAND

MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM.	
1,400kHz	620kHz
CT3	L4

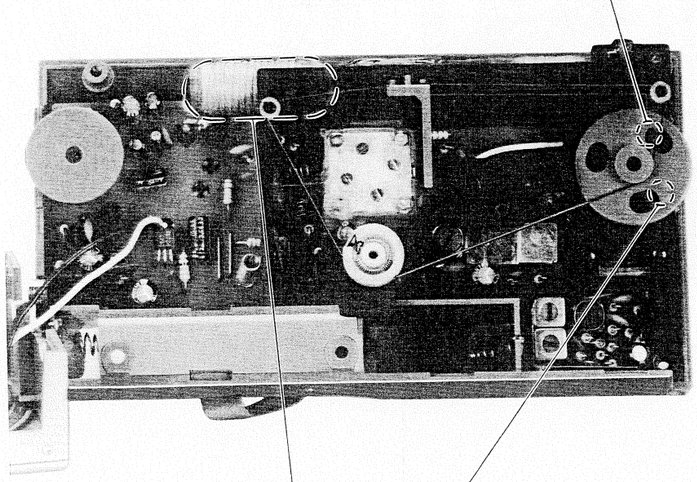


CT5	L5
1,680kHz	520kHz
Adjust for a maximum reading on VOM.	
MW FREQUENCY COVERAGE ADJUSTMENT	

T1	T4
455kHz	
Adjust for a maximum reading on VOM.	
AM IF ALIGNMENT	

LW BAND Adjust MW band ealier than LW band.

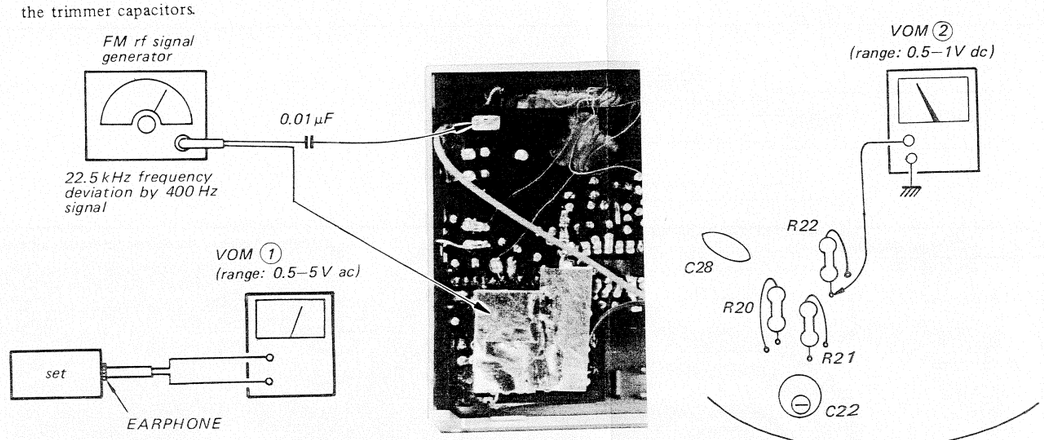
LW FREQUENCY COVERAGE ADJUSTMENT
Adjust for a maximum reading on VOM.
145kHz
CT6



L4	CT4
160kHz	240kHz
Adjust for a maximum reading on VOM.	
LW TRACKING ADJUSTMENT	

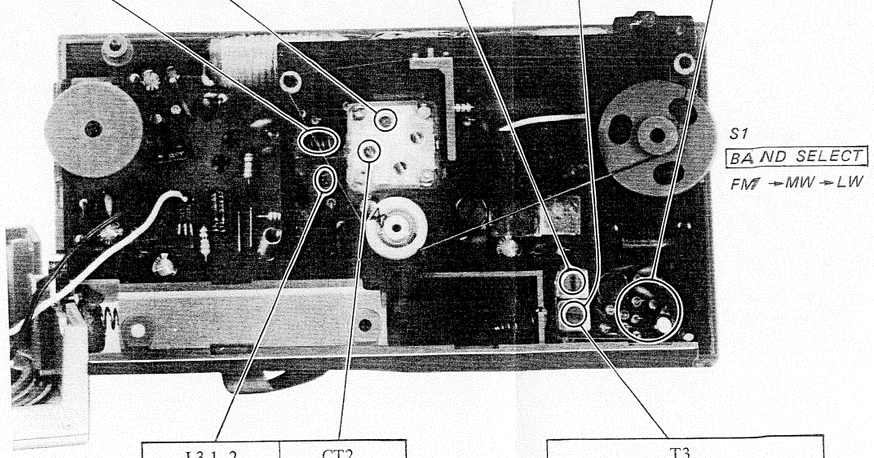
FM SECTION

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.



FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VOM ①.	
87.35MHz	108.25MHz
L1-1, 2	CT1

FM IF ALIGNMENT 1 (10.7MHz with modulation)	
Adjust for a maximum reading on VOM ①.	
T2	T3



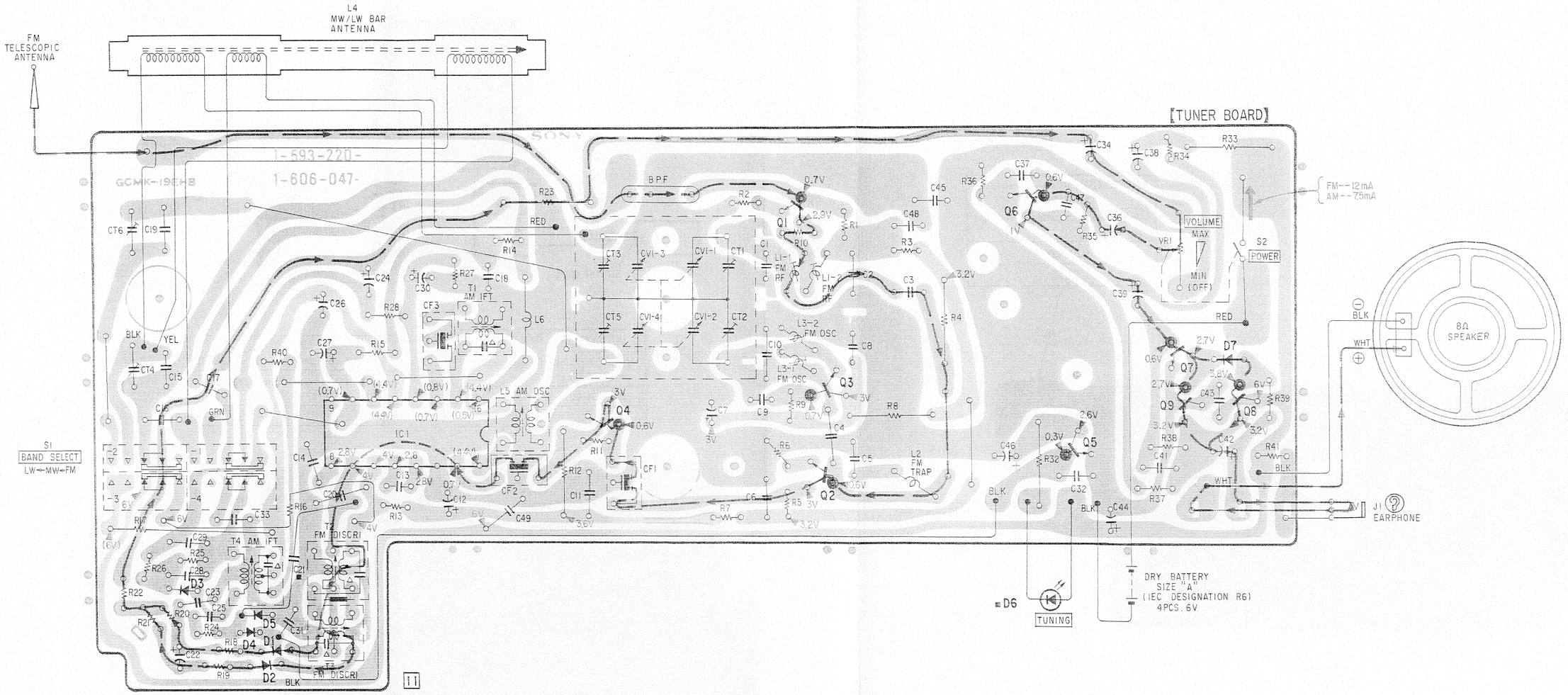
L3-1, 2	CT2
87.35MHz	108.25MHz
Adjust for a maximum reading on VOM ①.	
FM FREQUENCY COVERAGE ADJUSTMENT	

T3
Adjust for 0V reading on VOM ②.
FM IF ALIGNMENT 2 (10.7MHz with no modulation)

SECTION 4
DIAGRAMS

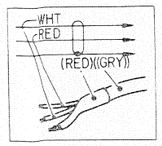
4-1. MOUNTING DIAGRAM

IC,Q	IC1								IC,Q
	4	1	3	2	6	5	9	7	8	
D	3	4, 5, 1, 2				6			7	D



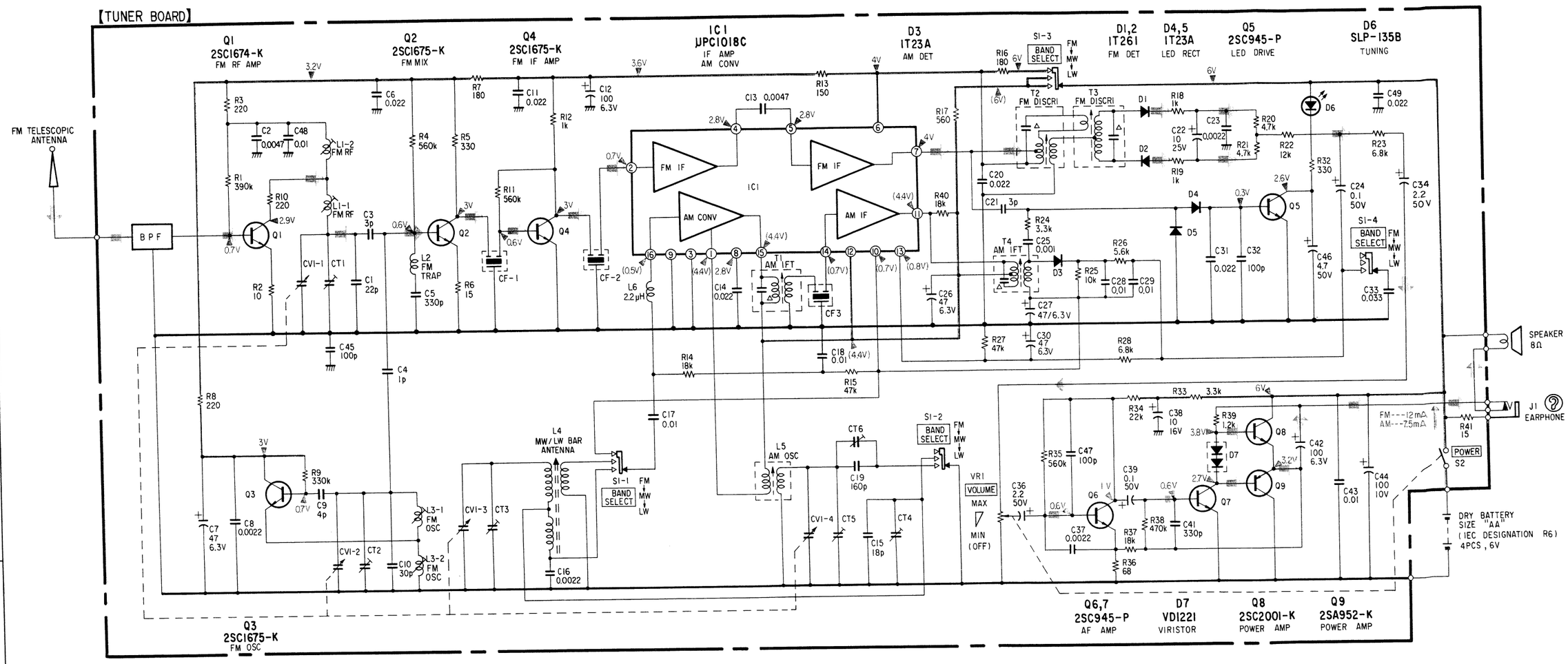
Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- —● : parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- [ ]— : indicates side identified with part number.
- ▨ : B+ pattern
- ⟹ : signal path

4-2. SCHEMATIC DIAGRAM



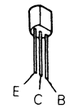
Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- △ : internal component.
- ▭ : panel designation.
- ▭ : signal path
- Readings are taken under no-signal (detuned) conditions. no mark : FM ( ) : AM
- Voltages are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- ——— : B+ bus.

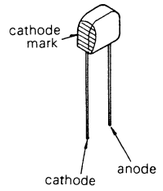
Note: Voltages are measured with a VOM (50kΩ/V).

- **Semiconductor Lead Layouts**

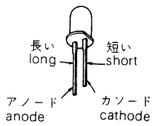
2SC1674-K
2SC1364
2SC2001
2SC2001-K
2SC1675-K
2SC945-P
2SA952
2SA952-K



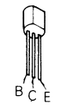
VD1221



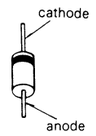
SLP135B



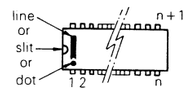
2SC710-13



1T261
1T22AM
1T23A

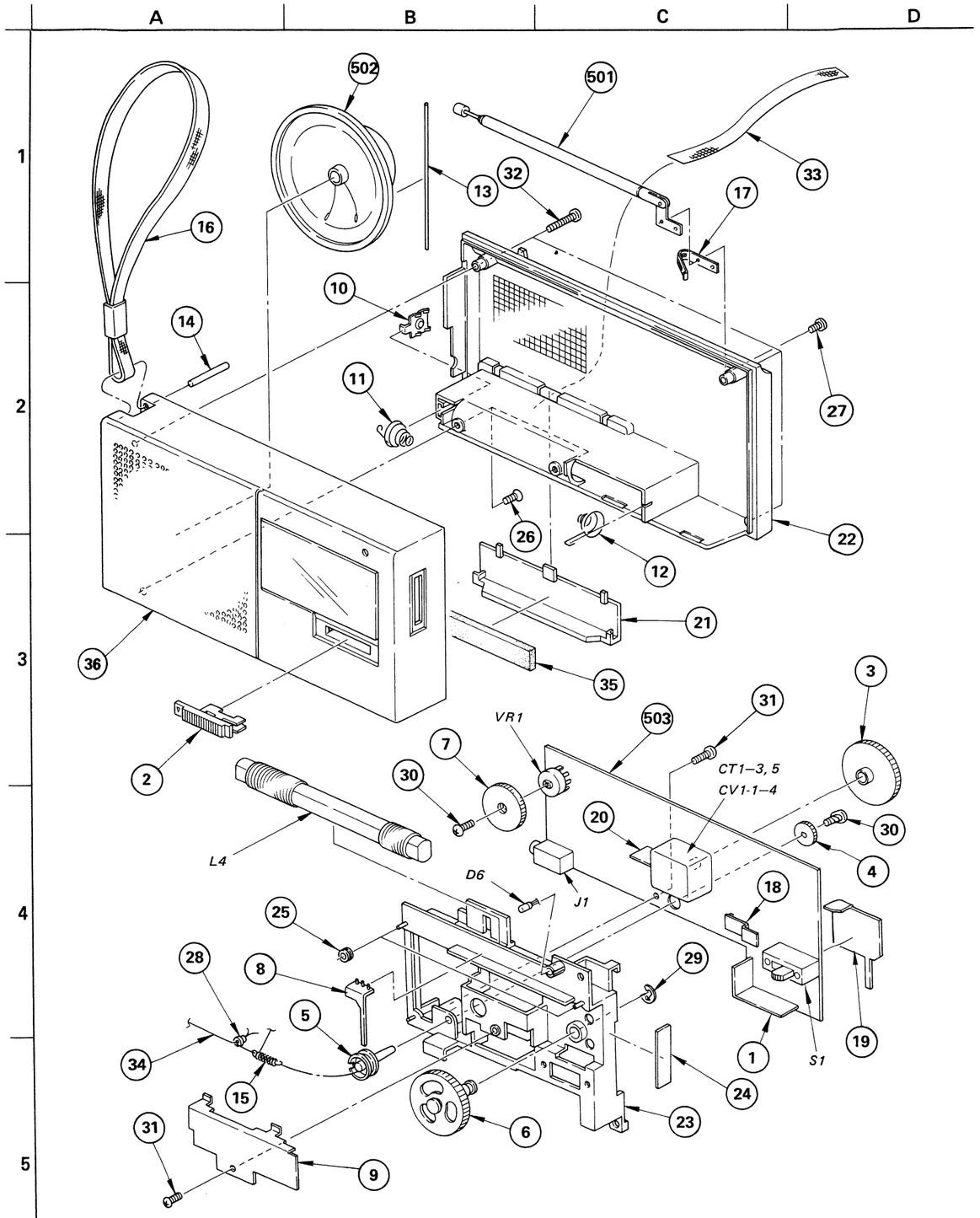


μPC1018C-E
μPC1018C



(Top view)

SECTION 5
EXPLODED VIEWS AND PARTS LIST



GENERAL SECTION

No.	Part No.	Description
1	♦;3-889-401-00	PLATE (D), SHIELD
2	3-889-402-00	KNOB, BAND
3	3-889-403-00	GEAR, DIAL DRUM
4	3-889-404-00	GEAR, DIAL
5	3-889-405-00	SHAFT, GEAR
6	3-889-406-00	KNOB, TUNING
7	3-889-407-00	KNOB, CONTROL
8	3-889-408-00	POINTER
9	♦;3-889-409-00	PLATE, BACK
10	3-889-410-00	PLATE, POLE, BATTERY
11	3-889-411-00	SPRING
12	3-889-412-00	SPRING
13	♦;3-889-414-00	ROD, RETAINER, SPEAKER
14	♦;3-889-415-00	STICK, HAND STRAP
15	3-889-416-00	SPRING
16	3-889-419-00	STRAP, HAND
17	♦;3-889-420-00	SPRING
18	♦;3-889-421-00	PLATE (A), SHIELD
19	♦;3-889-422-00	PLATE (B), SHIELD
20	♦;3-889-423-00	PLATE (C), SHIELD
21	3-889-424-00	LID, BATTERY CASE
22	3-889-428-00	LID, REAR
23	3-889-429-00	CHASSIS
24	3-889-430-00	TAPE
25	3-983-913-11	PULLEY
26	7-621-592-00	SCREW +K 2.6X6
27	7-621-661-18	SCREW +RK 2X5
28	7-623-605-01	EYELET, 1.3X2.5
29	7-624-108-04	STOP RING 4.0, TYPE -E
30	7-627-552-38	SCREW,PRECISION +P 1.7X3
31	7-685-133-11	SCREW +P 2.6X6 TYPE2 SLIT
32	7-685-138-21	SCREW +P 2.6X16 TYPE2 SLIT
33	9-911-816-01	CLOTH, DRAWER, BATTERY
34	9-911-825-32	STRING, TETRON DIAL (0.3)
35	9-911-844-XX	CUSHION, BATTERY
36	X-3889-401-1	(AEP)....FRONT CABINET ASSY
36	X-3889-402-1	(UK).....FRONT CABINET ASSY

ACCESSORY & PACKING MATERIAL

Part No.	Description
3-889-434-00	INDIVIDUAL CARTON
3-995-908-11	MANUAL, INSTRUCTION
3-998-901-00	LABEL (A,B), SERIAL NUMBER

ELECTRICAL PARTS

Ref.No.	Part No.	Description
501	1-501-205-21	ANTENNA, TELESCOPIC
502	1-503-082-00	SPEAKER
503	♦;A-3660-325-A	PC BOARD ASSY
BPF	1-231-720-00	FILTER, BANDPASS
C10	1-102-603-11	CERAMIC 30PF 5% 50V
CF1	1-527-795-71	FILTER, CERAMIC
CF2	1-527-795-71	FILTER, CERAMIC
CF3	1-231-993-00	FILTER, MECHANICAL
CT1-3, CT5, CV1-1, 1-2, 1-3, 1-4	1-151-391-00	CAP, TUNING, POLYETHYLENE
CT4	1-141-227-00	TRIMAR, CERAMIC
CT6	1-141-227-00	TRIMAR, CERAMIC
D1	8-719-026-11	DIODE 1T261
D2	8-719-026-11	DIODE 1T261
D3	8-719-422-21	DIODE 1T22AM
D4	8-719-422-21	DIODE 1T22AM
D5	8-719-422-21	DIODE 1T22AM
D6	8-719-901-35	DIODE SLP135B
D7	8-719-122-10	DIODE VD1221
IC1	8-759-110-15	IC UPC1018C-E
J1	1-507-398-00	EARPHONE JACK
L1	♦;1-422-057-00	COIL, AIR-CORE
L2	♦;1-409-293-00	COIL, AIR CORE
L3	♦;1-422-057-00	COIL, AIR-CORE
L4	1-401-927-00	ANTENNA, FERRITE-ROD (MW/LW)
L5	1-405-685-00	COIL,MW OSC
L6	1-408-109-00	MICRO INDUCTOR 2.2UH
Q1	8-729-167-42	TRANSISTOR 2SC1674
Q2	8-719-671-13	TRANSISTOR 2SC710-13
Q3	8-719-671-13	TRANSISTOR 2SC710-13
Q4	8-719-671-13	TRANSISTOR 2SC710-13
Q5	8-729-663-47	TRANSISTOR 2SC1364
Q6	8-729-663-47	TRANSISTOR 2SC1364
Q7	8-729-663-47	TRANSISTOR 2SC1364
Q8	8-729-100-13	TRANSISTOR 2SC2001
Q9	8-729-195-23	TRANSISTOR 2SA952
S1	1-553-890-00	SWITCH, SLIDE
T1	1-404-348-00	COIL, AM IFT
T2	1-403-959-00	TRANSFORMER,DISCRIMINATOR
T3	1-403-953-00	TRANSFORMER,DISCRIMINATOR
T4	1-404-211-21	COIL, IFT
VR1	1-224-077-00	RES,VAR,CARBON 5K

NOTE:
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.

CAPACITORS:
- All capacitors are in μF. Common capacitors are omitted. Refer to the following lists for their part numbers. MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms. Common 1/4W, 1/8W and 1/16W carbon resistors are omitted. Refer to the following lists for their part numbers.
- F : nonflammable

COILS
- MMH : mH, UH : μH

ELECTROLYTIC CAPACITORS

CAP. (μF)	RATING → : Use the high voltage rated one.					
	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47					→	1-121-726-00
1.0					→	1-121-391-00
2.2					→	1-121-450-00
3.3	→	→	→	1-121-392-00	→	1-121-393-00
4.7	→	→	→	1-121-395-00	→	1-121-396-00
10	→	→	1-121-651-00	1-121-398-00	→	1-121-738-00
22	→	→	1-121-479-00	1-121-480-00	1-121-662-00	1-121-152-00
33	→	→	1-121-403-00	1-121-404-00	1-121-652-00	1-121-405-00
47	→	1-121-352-00	1-121-409-00	1-121-410-00	1-121-653-00	1-121-411-00
100	→	1-121-414-00	1-121-415-00	1-121-416-00	1-121-357-00	1-121-417-00
220	1-121-418-00	1-121-420-00	1-121-421-00	1-121-422-00	1-121-261-00	1-121-423-00
330	1-121-751-00	1-121-805-00	1-121-521-00	1-121-654-00	1-121-655-00	1-121-656-00
470	1-121-424-00	1-121-425-00	1-121-426-00	1-121-733-00	1-121-361-00	1-121-810-00
1000	–	1-121-736-00	1-121-245-00	1-121-657-00	1-121-388-00	1-123-061-00
2200	1-121-658-00	1-121-659-00	1-121-660-00	1-123-067-00	1-121-984-00	–
3300	1-121-661-00	1-123-075-00	1-123-071-00	–	–	–

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	–	–	–	–
1.0	1-123-249-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-250-00	1-123-026-00	–	1-123-028-00
3.3	1-121-995-00	–	1-123-004-00	1-123-006-00
4.7	1-123-255-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-121-126-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-121-996-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-121-997-00	1-121-757-00	–	–
47	1-123-251-00	1-121-919-00	–	–
100	1-123-084-00	–	–	–

CERAMIC CAPACITORS

CAP. (pF)	RATING							
	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (μF)	50 VOLT.	
	PART No.		PART No.		PART No.		PART No.	
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00	
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00	
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00	
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00	
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00	
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00	
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00	
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00	
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00	
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00	
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00	
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00	
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00	
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00	
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00	
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00			
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00			
16	1-102-952-00	110	1-102-815-00					
18	1-102-953-00	120	1-102-816-00					
20	1-102-958-00	130	1-101-081-00					

0.001μF = 1,000pF

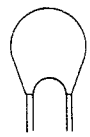
CERAMIC (SEMICONDUCTOR) CAPACITORS

CAP. (μF)	RATING → : Use the high voltage rated one.				
	25 VOLT.	50 VOLT.	CAP. (μF)	25 VOLT.	50 VOLT.
	PART No.	PART No.		PART No.	PART No.
0.001	→	1-161-039-00	0.018	1-161-016-00	1-161-054-00
0.0012	→	1-161-040-00	0.022	1-161-017-00	1-161-055-00
0.0015		1-161-041-00	0.027	1-161-018-00	1-161-056-00
0.0018		1-161-042-00	0.033	1-161-019-00	1-161-057-00
0.0022		1-161-043-00	0.039	1-161-010-00	1-161-058-00
0.0027	→	1-161-044-00	0.047	1-161-021-00	1-161-059-00
0.0033	→	1-161-045-00	0.056	→	1-161-060-00
0.0039	→	1-161-046-00	0.068	→	1-161-061-00
0.0047	→	1-161-047-00	0.082	1-161-024-00	1-161-062-00
0.0056	→	1-161-048-00	0.1	1-161-025-00	1-161-063-00
0.0068	→	1-161-049-00			
0.0082	1-161-012-00	1-161-050-00			
0.01	1-161-013-00	1-161-051-00			
0.012	→	1-161-052-00			
0.015	1-161-015-00	1-161-053-00			

MYLAR CAPACITORS

CAP. (μF)	RATING 50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.	CAP. (μF)	50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.	CAP. (μF)	50 VOLT. PART No.	100 VOLT. PART No.	200 VOLT. PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00	–	–
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00	–	–
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00	–	–
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00	–	–
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00				

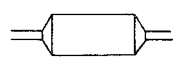
TANTALUM CAPACITORS



RATING → : Use the high voltage rated one.

CAP. (μF)	3.15 VOLT. PART No.	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	20 VOLT. PART No.	25 VOLT. PART No.	35 VOLT. PART No.
0.01					→	→	1-131-396-00
0.015						→	1-131-397-00
0.022						→	1-131-398-00
0.033						→	1-131-399-00
0.047						→	1-131-400-00
0.068					→	→	1-131-401-00
0.1					→	→	1-131-402-00
0.15					→	→	1-131-403-00
0.22					→	→	1-131-404-00
0.33					→	1-131-409-00	1-131-405-00
0.47	–	–	–	–	1-131-412-00	→	1-131-406-00
0.68	–	–	–	1-131-415-00	→	1-131-410-00	1-131-407-00
1.0	–	–	1-131-418-00	–	1-131-413-00	→	1-131-408-00
1.5	–	1-131-421-00	–	1-131-416-00	→	1-131-411-00	1-131-348-00
2.2	1-131-424-00	–	1-131-419-00	–	1-131-414-00	1-131-355-00	1-131-349-00
3.3	–	1-131-422-00	–	1-131-417-00	1-131-362-00	1-131-356-00	1-131-350-00
4.7	1-131-425-00	–	1-131-420-00	1-131-369-00	1-131-363-00	1-131-357-00	1-131-351-00
6.8	–	1-131-423-00	1-131-376-00	1-131-370-00	1-131-364-00	1-131-358-00	1-131-352-00
10	1-131-426-00	1-131-383-00	1-131-377-00	1-131-371-00	1-131-365-00	1-131-359-00	1-131-353-00
15	1-131-390-00	1-131-384-00	1-131-378-00	1-131-372-00	1-131-366-00	1-131-360-00	–
22	1-131-391-00	1-131-385-00	1-131-379-00	1-131-373-00	1-131-367-00		
33	1-131-392-00	1-131-386-00	1-131-380-00	1-131-374-00			
47	1-131-393-00	1-131-387-00	1-131-381-00	–			
68	1-131-394-00	1-131-388-00	–	–			
100	1-131-395-00	–	–	–			

TANTALUM CAPACITORS



CAP. (μF)	3 VOLT. PART No.	6.3 VOLT. PART No.	10 VOLT. PART No.	16 VOLT. PART No.	20 VOLT. PART No.	35 VOLT. PART No.
0.033						1-131-273-00
0.047						1-131-274-00
0.068						1-131-275-00
0.1						1-131-276-00
0.15						1-131-277-00
0.22			–	–	1-131-262-00	1-131-278-00
0.33			–	–	1-131-263-00	1-131-279-00
0.47			1-131-169-00	–	1-131-264-00	1-131-280-00
0.68			–	1-131-258-00	1-131-265-00	1-131-281-00
1.0			1-131-254-00	–	1-131-266-00	1-131-282-00
1.5		1-131-250-00	–	–	1-131-267-00	1-131-283-00
2.2		–	–	1-131-259-00	1-131-268-00	1-131-284-00
3.3		–	1-131-255-00	–	1-131-269-00	–
4.7		1-131-251-00	1-131-171-00	–	1-131-270-00	–
6.8		–	–	1-131-260-00	1-131-271-00	–
10	–	–	1-131-256-00	–	1-131-272-00	–
15	–	1-131-252-00	–	1-131-261-00		
22	–	–	1-131-257-00	–		
33	1-131-176-00	1-131-253-00	1-131-173-00	–		
47	1-131-288-00	1-131-174-00	–	–		
100	1-131-177-00					

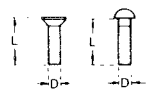
1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw:

P 3 x 10
- *L: Length in mm*
- *D: Diameter in mm*
- *Type of head*
- *Indicated slotted-head only.*
- *Unless otherwise indicated, it means cross-recessed head (Phillips type).*



Nut, Washer, Retaining ring:

N 3
- *Diameter of usable screw or shaft*
- *Reference designation*

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		braizer-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation

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